

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF NEW YORK

TOWN OF HALFMOON et al.,

Plaintiffs,

v.

Case No. 1:09-cv-0228, DNH-CFH

GENERAL ELECTRIC COMPANY,

Defendant.

SARATOGA COUNTY WATER AUTHORITY,

Plaintiff,

v.

Case No. 1:11-cv-006, DNH-CFH

GENERAL ELECTRIC COMPANY,

Defendant.

**GENERAL ELECTRIC COMPANY'S MEMORANDUM OF LAW
IN SUPPORT OF ITS MOTION TO EXCLUDE CERTAIN
OPINIONS OF KIRK WYE BROWN, Ph.D**

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INTRODUCTION

Kirk Brown, Ph.D., who for over thirty years was a Professor of Soil and Crop Sciences at Texas A&M University, has put forward a broad assortment of opinions in this case, most of which relate to the “fate and transport” of polychlorinated biphenyls (PCBs) in the Hudson River during and after the Dredging Project currently being undertaken by defendant General Electric Company (GE). He offers opinions about, among other things, the likelihood that the areas dredged during Phase 2 of the Dredging Project will meet the U.S. EPA’s residual standard for PCBs left in the sediment after dredging, Ex. 1¹ (Expert Witness Report of Kirk Wye Brown, Ph. D.) (Opinion 4.3); the adequacy of the water column monitoring for PCBs downstream of the dredging operations (Opinion 4.7); and the time that may be required post-dredging before the River has returned to pre-dredging concentrations of PCBs in the water (Opinion 4.10). Although those opinions are doubtful in many respects, their problems can be adequately addressed through the traditional methods of cross-examination and the presentation of contrary opinions from those with a different knowledge base and methodology.

In the midst of these fate-and-transport opinions, however, Dr. Brown also ranges widely across the other issues relevant to this case and opines: (1) that communities that used to draw their drinking water from the Hudson River will need to use alternative sources of water long after the Dredging Project is concluded (Opinion 4.5 at 30-33); (2) that potential spikes in PCB concentrations cannot be predicted with sufficient certainty to permit municipalities along the Hudson River to use it as a safe source of drinking water (Opinion 4.6); (3) that it will not be safe for residents of plaintiff Town of Halfmoon to use the River for drinking

¹ All exhibits are appended to the accompanying Declaration of William J. Bachman in Support of General Electric Company’s Motion to Exclude Certain Opinions of Kirk Wye Brown, Ph.D.

water until there are no PCBs in the river (Opinion 4.11); and (4) that the only way to ensure safe drinking water for communities along the River is to provide a permanent source of alternative water for them (Opinion 4.12).² In his rebuttal report, Dr. Brown offers the opinions (1) that GE's behavior in the first ten years after PCBs were identified as a potential environmental problem showed a "lack of commitment to environmental protection," Ex. 2 (Expert Rebuttal Report of Kirk Wye Brown, Ph.D., Feb. 14, 2014) at 15-16; (2) that the leaks and spills of PCBs that GE experienced during the years it used the chemicals were "excessive" and showed a lack of diligence on GE's part, *id.* at 17-18; and (3) that the plaintiff municipalities' obtaining alternative water was consistent with the EPA's National Contingency Plan (NCP), *id.* at 35. It is to these opinions about PCB health effects, about how municipalities should evaluate the risks of using the River as a source for drinking water, about GE's historical conduct with respect to PCBs, and about the plaintiffs' NCP compliance, that this motion to exclude is directed, because Dr. Brown's opinions on those matters clearly do not meet the requirements of Rule 702.

² Although Dr. Brown was put forth as an expert by counsel for plaintiffs Stillwater, Waterford, Saratoga County and the Saratoga County Water Authority, his report and testimony contain numerous references to opinions about Halfmoon. Dr. Brown did state that he was not planning to offer at trial opinions on behalf of former plaintiffs Stillwater and Waterford. Ex. 3 (Brown deposition) at 20:22-25. For purposes of this motion, however, it makes no difference on whose behalf the opinion is offered, and we address any opinion that Dr. Brown has expressed about any of the remaining plaintiffs, in the event Halfmoon at some point seeks to rely on Dr. Brown's opinions.

ARGUMENT

I. Rule 702 Places Limits on the Allowable Scope of an Expert's Testimony.

Rule 702 of the Federal Rules of Evidence provides:

If scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education, may testify thereto in the form of opinion or otherwise, if (1) the testimony is based upon sufficient facts or data, (2) the testimony is the product of reliable principles and methods, and (3) the witness has applied the principles and methods to the facts of the case.

Under the Supreme Court's decision in *Daubert v. Merrell Dow Pharm., Inc.*, 509 U.S. 579 (1993), which Rule 702 now largely codifies, "the district court functions as the gatekeeper for expert testimony." *Raskin v. Wyatt Co.*, 125 F.3d 55, 66 (2d Cir. 1997). The first threshold that must be crossed, of course, is that the witness is "qualified as an expert by knowledge, skill, experience, training or education." Fed. R. Evid. 702. In evaluating an expert's qualifications, federal courts properly insist that the expert's testimony rest on genuine expertise and not just personal opinion unconnected to any relevant training or experience in the subject matter. *See, e.g., Adams v. Ameritech Servs., Inc.*, 231 F.3d 414, 423 (7th Cir. 2000).

Qualifications must be analyzed on an opinion-by-opinion basis. Being an expert in one field does not give a witness a free pass to offer opinions in other fields. An expert must "stay within the reasonable confines of his subject area, and cannot render expert opinion on an entirely different field or discipline." *Lappe v. American Honda Motor Co.*, 857 F. Supp. 222, 227-28 & n.4 (N.D.N.Y.1994) (citing cases of experts excluded for lack of qualifications), *aff'd*, 101 F.3d 682 (2d Cir. 1996).

Even if a proposed expert is otherwise qualified, his testimony is admissible only if the processes or techniques he used in formulating his opinions are scientifically reliable. *See Daubert*, 509 U.S. at 592. "[W]hen an expert opinion is based on data, a methodology, or

studies that are simply inadequate to support the conclusions reached, Daubert and Rule 702 mandate the exclusion of that unreliable opinion testimony.” *Amorgianos v. Nat’l R.R. Passenger Corp.*, 303 F.3d 256, 266 (2d Cir. 2002). “[T]he court is not obligated to accept a conclusion if it does not reliably flow from the facts available and methodologies used.” *Adel v. Greensprings of Vt., Inc.*, 363 F. Supp. 2d 683, 687 (D. Vt. 2005). This naturally follows from the Supreme Court’s admonition that nothing in the Federal Rules of Evidence “requires a district court to admit opinion evidence that is connected to existing data only by the *ipse dixit* of the expert.” *General Elec. Co. v. Joiner*, 522 U.S. 136, 146 (1997).

It is also settled that the party proffering an expert has the burden of establishing the admissibility of his testimony by a preponderance of the evidence. *United States v. Williams*, 506 F.3d 151, 160 (2d Cir. 2007). Given the flaws in what Dr. Brown has done when he reaches outside the bounds of his training and expertise, plaintiffs cannot meet that burden as to the opinions challenged here.

II. Dr. Brown Has Neither the Expertise Nor a Reliable Methodology to Justify the Admissibility of His Opinions About the Safety of the Hudson River as a Source of Drinking Water.

As noted above, most of Dr. Brown’s report and opinions relate in some fashion to the fate and transport of PCBs in the Hudson River. But in the midst of offering those opinions, he adds conclusions that go well beyond the boundaries of fate-and-transport issues into questions of PCB health effects and the implications of those health effects for municipal water suppliers. His Opinion 4.5 is a good example. That opinion, which is labeled “Resuspension,” spans three pages of text, in which he discusses, among other things, how the EPA expected its Engineering Performance Standards to address concerns about sediment being resuspended during the dredging process; the differences between the EPA’s predictions and the actual

reported releases from resuspension observed in Phase 1 of the dredging; and his expectations about resuspension during the rest of the project. Ex. 1 at 30-33. As he closes the section, he first offers an opinion about the duration of resuspension: “These elevated PCB concentrations are likely to continue through the end of dredging and after dredging is completed.” *Id.* 33. But he then adds a “commentary” about what he claims to be the implications of the resuspension he predicts: “Therefore, it is my opinion that alternative water supplies were required for the communities during dredging and will be required long after dredging is completed to minimize further exposure to PCBs.” *Id.*

Similarly, in Opinion 4.6 (“Uncertainty”), he spends three and half pages discussing why he believes that measuring and predicting PCB levels in the River is difficult and will be marked by significant uncertainty. *Id.* at 33-36. But he then offers up his own opinion as to what the implications are for use of the River as a safe drinking water source: that levels of PCBs in the river cannot be predicted with the degree of certainty necessary “to permit the plaintiff municipalities to utilize the Hudson River as a safe source of drinking water supply not threatened by PCBs.” *Id.* 36.

In Opinion 4.11 (“Alternative Water”), he discusses exposure pathways, monitoring data from various times during 2009 through 2011, and arrangements described in the EPA’s Community Health and Safety Plan to pay for alternative water for some of these communities during certain periods of time. *Id.* at 44-46. He leaps from those observations to the conclusion that the River will not be suitable as a source for drinking water “[u]ntil there are no longer any releases or threatened releases of PCBs to the river and all of the PCBs already in the river have been sequestered or removed.” *Id.* 46.

In Opinion 4.12 (“Permanent Water Supply”), he reviews various standards the EPA has used to assess PCB levels, criticizes the current drinking water standard of 500 parts per trillion (ppt) as an “unthinkable” measure of when human exposure occurs, revisits the issue of resuspension caused by the dredging, and repeats his conclusion that the dredging and other related measures will not “reduce PCB concentrations in the water column to zero.” *Id.* at 47. The implication, he says, is that the only answer for these communities, including Halfmoon and Saratoga County, is “a permanent, alternative drinking water source.” *Id.*

The problem with these ultimate conclusions, many of which appear in the summary statement that begins each opinion, is that Dr. Brown lacks both the expertise and the reliable factual and methodological basis necessary to render an admissible opinion about PCB health effects and the implications of the Dredging Project for municipal water suppliers.

A. Dr. Brown Lacks the Qualifications to Opine About the Risks from Various Levels of PCBs in the Hudson River as a Source of Drinking Water.

Rule 702 requires that an individual put forward as an expert witness “be qualified as an expert by knowledge, skill, experience, training or education.” Fed. R. Evid. 702. Although that requirement is generally interpreted liberally, it remains the case that “[i]n some circumstances, . . . a district court may properly conclude that witnesses are insufficiently qualified despite the relevance of their testimony because their expertise is too general or too deficient.” *Stagl v. Delta Air Lines, Inc.*, 117 F.3d 76, 81 (2d Cir. 1997). Perhaps most pertinent here, as noted above, the courts do not hesitate to exclude expert opinions when the expert fails to “stay within the reasonable confines of his subject area” and seeks to “render expert opinion on an entirely different field or discipline.” *Lappe*, 857 F. Supp. at 227.

Dr. Brown’s failure to keep within those confines is the problem here. He does not claim that he has any formal training in PCB health effects or toxicology generally as part of

his academic work leading to his degrees in agronomy. His lengthy discussion of his qualifications in his expert report, Ex. 1 at 8-12, makes no mention of PCB health effects (in fact, there is only one mention of PCBs at all, and it has to do with the fate and transport of PCB oils in a river system) and only a few references to human health effects from any environmental chemical. Perhaps more tellingly, he admits that PCB health effects are not among the toxicological issues he has worked on in his career:

Q Are you a toxicologist, Dr. Brown?

A I have not -- I don't have a degree in toxicology, but I have in fact worked on various components of toxicology over the years.

Q *Over the years have you worked on components of toxicology related to human health risks associated with PCBs?*

A *Not specifically PCBs, but I have worked on many other chemicals.*

Q *But not PCBs?*

A *Not PCBs.*

Q Are you an epidemiologist?

A No.

Q Do you have epidemiological training?

A No.

Q Have you published any articles on the human health effects of PCBs in peer reviewed literature?

A I have not.

Ex. 3 (Brown deposition) at 29:11-30:4 (emphasis added).

In his curriculum vitae, Dr. Brown identifies almost thirty “Areas of Expertise,” only one of which touches on toxicology or risk assessment – namely, the risk of soil contaminants to plants and animals – and none of which refer to PCBs, human health effects, or the toxicity

of chemicals in drinking water. Ex. 1, Appendix 1. His lengthy list of almost 200 publications is likewise devoid of any mention of PCB health effects. *Id.* Rather his claimed knowledge of these subjects appears to come solely from reading some scientific literature, although the only scientific report he refers to is a recent publication by the International Agency for Research on Cancer (IARC) reclassifying PCBs as a human carcinogen. Ex. 1 at 20, Ex. 3 at 28:17-29:10.

Dr. Brown has had his testimony excluded before because he moved beyond the subject matter of fate and transport of chemicals into topics of toxicology and medical causation. In *Palmer v. Asarco, Inc.*, No. 03-CV-0498-CVE-PJC, 2007 WL 2302584 (N.D. Okla. Aug. 7, 2007), he sought to offer not only opinions about the movement of dust containing lead and resulting increases in soil concentration at the plaintiffs' residences, but also opinions to the effect that children living at those residences had experienced an increased intake of lead or had an elevated blood level. *Id.* at *10. The court excluded the testimony because his fate-and-transport knowledge and background did not provide him the necessary expertise or qualifications to offer reliable opinions about matters of toxicology, which the court described as the "study of how substances are absorbed into the body and the effect of substances on the human body," *id.* at *8, or medical causation. That same problem is obviously present here.

The cases are clear that, even with the generally liberal view of expert qualifications that Rule 702 adopts, expertise in one topic does not create license for a witness to speak about any and all subjects that might be on his mind. *See, e.g., Nimely v. City of New York*, 414 F.3d 381, 399 n. 13 (2d Cir. 2005) (abuse of discretion to allow forensic pathologist to testify about officer's perception since pathologist lacked expertise in human perception and cognitive function); *McCulloch v. H.B. Fuller Co.*, 981 F.2d 656, 657-58 (2d Cir. 1995) (expert qualified to testify as industrial engineer was not qualified to opine about whether warning labels were

adequate); *SEC v. Tourre*, 950 F. Supp. 2d 666, 677-78 (S.D.N.Y. 2013) (economic consultant who had testified in numerous securities cases and who was familiar with structured finance generally held not qualified to opine about collateralized debt obligations at issue); *Dreyer v. Ryder Automotive Carrier Group, Inc.*, 367 F. Supp. 2d 413, 431 (W.D.N.Y. 2005) (Ph.D. in mechanical engineering could not testify that accident may have been caused by side effects of medication taken by the plaintiff).

For those same reasons, when Dr. Brown, the professor of agronomy and student of how contaminants move in soils, wanders into the thicket of PCB health effects and how municipalities should evaluate the health effects of various levels of PCBs in the source of their drinking water, he is well beyond the area in which he has the requisite knowledge, skill, experience, training, or education required to offer an admissible expert opinion.

B. Even if He Were Deemed Qualified, Dr. Brown Provides No Reliable Basis for His Opinions about PCB Health Effects and How Water Suppliers Should Evaluate the Human Health Risks of Various Levels of PCBs in their Raw Water.

The problem for Dr. Brown is not only his lack of background, training, and experience concerning the human health effects of PCBs in drinking water, but also the lack of reliable scientific underpinning for the opinions on PCB toxicology and health effects that he proposes to offer. His primary opinion on these issues, Opinion 4.11, is that the Hudson River will not be a safe source for drinking water until all of the PCBs in the River, or that could potentially reach the River, have been identified and removed. Ex. 1 at 44-46. In explaining that opinion, he states: “Until there are no longer any releases or threatened releases of PCBs to the river and all of the PCBs already in the river have been sequestered or removed . . . the water drawn from the Hudson River is not suitable as a drinking water source.” *Id.* at 46. At his

deposition he confirmed the “zero PCBs” reading of his opinion, when asked about plaintiff Halfmoon:

Q. So focusing on the Town of Halfmoon. Is it your opinion that until there are zero PCBs in the river it is unsafe for the Town of Halfmoon to provide drinking water through its water treatment plant to its customers?

A. Yes.

Ex. 3 at 31: 2-7. He later “clarified” that by “zero PCBs” he meant “no detectable level,” to the extent those are different. *Id.* at 181: 12-16 (“If that 5-nanograms [released to the river] is diluted enough so that we get to the point where we’re at the detection limit, the detection limit is less than a part per trillion, which kind of is the zero level, then small releases will be diluted that you won’t see it anymore.”).

His explanation of the “basis” for this opinion does not come close to crossing the reliability threshold. He recites that the “[i]ngestion of PCB contaminated water increases the probability of cancer and other health risks,” which he knows from “reading the literature, from my studies, from my awareness of this problem for decades.” *Id.* at 28:17-24. He never explains what particular literature he has in mind or how he can connect that literature to the opinion he offers. The only specific literature he cites is the recent statement by IARC, coupled with his general understanding of how various groups decide whether a chemical should be considered a carcinogen. *Id.* at 29:2-10. After criticizing the EPA’s Maximum Contaminant Limit for PCBs in drinking water (500 ppt) as being an “arbitrary number” that has “no relation to risk assessment,” *id.* at 66:9-10, he admits that in reaching his personal “zero PCBs” standard, he had done no risk assessment of his own, *id.* at 186: 3-7.

Dr. Brown refers to no scientific authority or body of learning holding that river water cannot be safely used as a source for municipal water suppliers unless and until it contains non-

detectable concentrations of PCBs. The EPA, which has been aware of PCBs in the water column of the Hudson River since the mid 1970s, has never declared that PCBs must be non-detectable before the River is safe to use as a source of drinking water,³ and indeed it never cited concern about the use of the River for drinking water as a reason to dredge the River in the first place. Several municipalities used the River as a source of drinking water for years before the beginning of the Dredging Project. New York's Department of Environmental Conservation and Department of Health, which likewise have been aware of and monitoring PCBs in the water column of the River for decades, have never told any community that the River was unfit to use as a source of raw water for a municipal drinking water system.

Moreover, Dr. Brown specifically disclaimed relying on any other experts in the case for his opinions about health risks: "No, I'm not relying on other experts for that. I have my own opinion on that." *Id.* at 27:16-23. Thus, he is not, for example, relying on Dr. David Carpenter, the Saratoga County plaintiffs' expert witness about health effects. Instead, Dr. Brown insists that his opinions on health effects must stand or fall, as he put it, based upon his "own opinion on that." *Id.* at 27:22-23. Of course he could not be relying on Dr. Carpenter for his "zero PCBs" opinion, because Dr. Carpenter does not hold that opinion. He testified that he would not embrace the notion that at a PCB concentration of 20 ppt in the River, a community would have to seek alternate water: "Q: Would you believe it would be reasonable for the public water system to conclude that it needs to switch in the circumstances I described? A: With 20 ppt, no." Ex. 4 (Carpenter deposition) at 135:2-136:23.

³ Dr. Brown at one point claims that 34 micrograms/liter (equivalent to ppt), a standard for PCBs in tap water, was the result of a risk-based analysis by the EPA. Ex. 2 at 31. Even accepting that statement as correct, such a standard would obviously provide no support for the "zero PCBs" standard that he advocates.

Dr. Brown's different view is no doubt, as he says, his "own opinion," but that does not give him the necessary factual and scientific foundation to make that opinion admissible under Rule 702. His leap from an inadequate foundation to an extreme endpoint is the worst form of inadmissible *ipse dixit*. See, e.g., *Joiner*, 522 U.S. at 146, *Louis Vitton Malletier v. Dooney & Burke, Inc.*, 525 F. Supp. 2d 558, 643 (S.D.N.Y. 2007) (excluding testimony because the court "does not fulfill its gatekeeper function if it simply accepts the *ipse dixit* of an expert").

It is obvious that Dr. Brown is offering health effects opinions without a reliable foundation. He compounds the problem, however, when he "applies" his personal health effects opinions to offer views about what municipal water suppliers should and should not do when confronted with various concentrations of PCBs in the River. In so doing, he is venturing squarely into areas that require not only a sophisticated understanding of toxicology and risk assessment but also, for example, knowledge of how water systems operate, what level of risk municipal water providers routinely consider acceptable with respect to any contaminant, and how PCB levels can be controlled by filtration. Dr. Brown dispenses with that last issue with the conclusory assertion that filtration is not a viable alternative. Ex. 2 at 31-32. When he tried to bolster that opinion by claiming that, in any event, alternative water was less costly than filtration, he revealed the lack of any factual foundation for his opinion:

Q. So are you able to say that the City of Troy connection [that is, alternate water] was the least add-on cost option?

[objection omitted]

A. At the time I wrote the report that opinion was based on what I had available to me. But I haven't looked at that since.

Q. And what was available to you?

A. There were some documents, but it's vague to me.

Ex. 3 at 225:13-25. The problem, however, is more severe than just vagueness and a lack of memory, because it does not appear that he ever had all of the requisite information:

Q. You refer here in this paragraph that I was just talking about at the end of the paragraph in parentheses to the added expense for disposal and handling costs Halfmoon would have incurred had it relied on a PAC [powdered activated carbon filtration] system during dredging. Do you know how much those added expenses would have been?

A. No. I didn't have an opportunity to get those together.

Id. at 224:15-22.

Dr. Carpenter, the Saratoga County plaintiffs' expert on PCB health effects, at least acknowledged the limits of his expertise with respect to opining about the numerous technical and practical decisions that municipalities must make in balancing costs and risks:

Q. So if we – we think of this cycle as a ledger, there is a cost – a risk side and then a cost side, and your focus and expertise is on the risk side, correct?

A. That's correct.

Q. And you leave it to others to look at the – the cost side?

A. That's right.

Q. Although I'm sure you have your own personal views on that?

A. I have my personal views, yes. But that's, again, not my area of expertise.

Ex. 4 at 57:23-58:10.⁴

Dr. Brown, on the other hand, gives no indication of understanding the difference between his personal views and expert opinions, and he expresses no appreciation for the limits of his own expertise or knowledge. But given the limits of his background and training, his

⁴ Despite this clear admission about his lack of expertise, Dr. Carpenter nonetheless offers a variety of opinions on topics such as when water suppliers along the River should use alternate sources of water. Where Dr. Carpenter strays into areas admittedly beyond his expertise, his opinions likewise deserve exclusion. GE is separately moving to exclude certain of his opinions.

admitted failure to gather the requisite data on costs, and his inability at his deposition to provide any foundation for his opinion except for a vague recollection of some documents he believes he once saw, Dr. Brown's opinions about PCB health effects and about the conditions under which municipal water suppliers should and should not use the Hudson River as a source of raw water cannot pass muster under Rule 702.

For all these reasons, Dr. Brown should be precluded from opining that:

- communities that used to draw their drinking water from the Hudson River will require alternative water long after the Dredging Project is concluded (Opinion 4.5);
- potential spikes in PCB concentrations cannot be predicted with sufficient certainty to permit municipalities along the Hudson to use the river as a safe source of drinking water (Opinion 4.6);
- it will not be safe for residents of Halfmoon to use the river for drinking water until there are no PCBs in the River (Opinion 4.11); and
- the only way to ensure safe drinking water is to provide a permanent source of alternative water for the Plaintiff communities (Opinion 4.12).

III. Dr. Brown Has No Reliable Factual or Methodological Basis for His Opinions About GE's PCB Handling Practices or About the Timeliness of GE's PCB-Control Efforts in the Period from 1967 to 1977.

In his initial report, Dr. Brown offered no opinions about GE's conduct in its manufacturing practices during the years it used PCBs or about the company's response to the early published reports suggesting that PCBs were a potential environmental issue. In his rebuttal report, however, he delves into both topics. As with so many of his opinions, however, he is again expressing what are, at best, personal views, grounded in insufficient facts and not helpful to the trier of fact in this case.

With respect to manufacturing practices, Dr. Brown would like to opine that the leaks and spills that GE experienced at its capacitor plants were “excessive” and “demonstrate a lack of diligence” on GE’s part:

I agree with [GE expert] Dr. Shifrin in that leaks and spills were common at manufacturing facilities, especially during the time when GE used PCBs to manufacture transformers and capacitors. However, the loss rate of PCBs by the GE facilities was excessive, even when compared to the relatively lax standards cited by Dr. Shifrin.

Ex. 2 at 18. His “basis” for that opinion is his reading of several memos from GE employees about the rate at which PCBs were believed to have been lost in the manufacturing process. He admitted in his deposition that one of the numbers in his report was a misinterpretation of the underlying document, Ex. 3 at 216:8-19, as a result of which he erroneously more than doubled the historic estimate upon which he claimed to be relying. But the more fundamental problem is his lack of any scientifically or technically defensible benchmark against which to declare that what GE discharged was “excessive”:

Q. My question was, did you compare GE’s loss rate of PCBs with that of other transformer and capacitor manufacturers at the time?

A. I have not.

Q. Did you compare GE’s loss rate with that of other industry users of PCBs at the time?

A. I have not, but that’s no excuse.

Id. at 210:12-18. “Excessive” to Dr. Brown means his personal views based on an unidentified Army Corp of Engineers regulation from 1963 and his own views about how earlier statutes concerning oil releases should have been seen as applicable to PCB discharges. *Id.* at 210:21-25. Having not looked at the issue of industry practices, however, he simply has no scientific basis for a reliable and admissible opinion about what constitutes “excessive” discharges.

He does no better with his opinion about the pace of GE's reaction to the first publications in the late 1960s about possible environmental problems associated with PCBs. He believes GE's response suggested a lack of environmental concern on the company's part: "In my opinion, the ten year period from when PCBs were first identified as an environmental hazard until the elimination of PCB discharge by GE in 1977, demonstrates a lack of regard by GE for the Hudson River and the residents that utilize the river as a source of drinking water." Ex. 2 at 14-15. A few pages later, focusing on the period from 1970 to 1975, he likewise declares that, "[i]n my opinion, five years to implement these control measures was excessive, indicating a lack of responsiveness on behalf of GE to fix the problems they had allowed to continue for decades." *Id.* at 16.

The law is clear that if the standard of care in a particular field is not within the common knowledge of lay people, then it may be established only through expert testimony. *See Nat'l Telephone Co-op Ass'n v. Exxon Mobil Corp.*, 244 F.3d 153, 156-58 (D.C. Cir. 2001) (expert testimony required to establish standard of care for performing an environmental remediation). The premise of that rule, of course, is that an expert can and must bring to bear on the question of the standard of care more expertise and knowledge than a lay person would be expected to have. But Dr. Brown's opinions, uninformed by the application of any specialized knowledge, would make a mockery of that requirement. Courts have not hesitated to exclude expert opinions on the standard of care when it is clear the expert has no reliable foundation for that opinion. *See, e.g., O'Connor v. Boeing North American, Inc.*, No. CV 97-1554 DT (RCx), 2005 WL 6035255 at *16 (C.D. Cal. Aug. 18, 2005) (expert failed to establish standard of care for flushing rocket engine with TCE). That same result is required here.

Again, Dr. Brown is offering a purely personal view, not admissible expert testimony. He provides no frame of reference against which to measure the speed of GE's response. He analyzes no data about the success of various interim measures undertaken by GE in reducing PCB discharges in the period before 1977. He ignores, among other things, the fact that no federal or state regulatory agency had declared the Hudson River unfit as a source of drinking water in the period before the Dredging Project. He can have his feelings about these subjects, and express them in a variety of settings. But his personal views, tethered as they appear to be, to his view that the River can only be a safe source of drinking water if it has "zero PCBs," do not constitute admissible expert testimony under Fed. Rule Evid. 702. Thus, Dr. Brown should be precluded from offering opinions about:

- GE's manufacturing practices in the years it used PCBs, including the rate of leaks and spills from its manufacturing operations; and
- the pace at which GE implemented control measures in the years after PCBs were identified as a potential environmental issue.

IV. Dr. Brown Has No Reliable Basis for His Opinions About Plaintiffs' Compliance with the NCP.

It is not entirely clear whether plaintiffs intend to proffer an opinion from Dr. Brown about whether their purported response actions complied with the NCP. None of the enumerated opinions in his opening report speak to NCP compliance, although there is one sentence at the end of his Executive Summary that simply states that "The response actions and associated costs to obtain an uncontaminated source of drinking water are consistent with the National Oil and Hazardous Substances Pollution Contingency Plan (40 CFR §300.5) and as stipulated under the Comprehensive Environmental Response, Compensation, and Liability Act (42 USC §9601)." Ex. 1 at 7. The remainder of his opening report says nothing else about

the topic of NCP compliance or about which actions by which plaintiffs he was referring to in his single comment.

However, Dr. Brown devotes a page and a half of his rebuttal report to expressing his disagreement with Steven Johnson, GE's expert on NCP compliance. Ex. 2 at 34-35. After summarizing Mr. Johnson's key points, Dr. Brown states simply "I disagree with Mr. Johnson and believe the responsibility for completing these particular elements lies with GE." *Id.* at 35. His rationale is pure personal opinion: "The residents of the towns should not be responsible for paying for the cost of the RI [remedial investigation] and the feasibility study in addition to the higher cost of water. Since GE failed to fulfill its obligations, the towns were justified in seeking an alternate source of drinking water." *Id.* He ignores the factual record (including that the Dredging Project was designed, through the Engineering Performance Standards, to mitigate any impact of resuspension on community drinking water suppliers; and that at the EPA's direction, GE performed a Water Supply Options Analysis to develop contingency plans for any occasions when the water supplies were at risk), and he cites no provision of CERCLA, the NCP regulations, or anything else to support his own personal views about who should have done what to comply with the NCP. He also claims that GE and Mr. Johnson "ignore[] the fact that EPA endorsed the response actions taken by the municipalities to connect to alternative water sources," Ex. 2 at 35, but he thereby completely misses the point, since the NCP compliance debate in this case is about actions the towns took that went **beyond** those that the Agency endorsed or agreed to fund (*e.g.*, their use of alternative water supplies in 2013, 2014, and 2015 during portions of the year when there is no dredging taking place).

Dr. Brown's deposition testimony about Halfmoon's decision to use Troy water full-time since 2010, which he claims to believe was an NCP-compliant response action, Ex. 3 at

226:5-11, demonstrates the lack of any meaningful foundation for his opinions about NCP compliance:

Q. When is the last time that you looked at the NCP?

A. Oh, it's been three or four years.

Q. Now, you don't cite any NCP provisions in your rebuttal report. So my question is what provisions did you rely upon in coming to your conclusion here that Halfmoon's decision to go on Troy water full-time was consistent with the NCP?

A. I didn't cite anything. And the other thing I would say it's more really a legal question than a scientific technical question.

Q. Okay. But you've offered an opinion –

A. I did, yes, I admit that.

Q. Dr. Brown, and I'm just trying to understand the basis for that opinion.

A. It was my understanding of what was consistent with the NCP.

Q. And I'm saying what provisions of the NCP did you rely upon in coming to your conclusion that Halfmoon's use of Troy water was consistent with the NCP?

A. I'd have to go back and review it to tell you which ones.

Id. at 227:2-23.

After disclaiming any views on whether what Halfmoon did constituted a “response” action or a “remedial” action, which is a threshold distinction that dictates the specifics of one's NCP compliance obligations, Dr. Brown was candid about his lack of any basis on which to opine about Halfmoon:

Q. Does the NCP include the steps that a party has to take in order to make a cost recovery claim for response costs under CERCLA?

A. Yes, they do.

Q. What steps under the NCP was Halfmoon required to take?

A. I'd have to go back and check. I haven't looked at that for a long time.

Q. Do you know if Halfmoon in fact took those steps?

A. I do not.

. . . .

Q. Do you know if under the NCP Halfmoon was required to perform an RI/FS?

A. If they were, I'm not aware of that.

Id. at 228:10-15, 229:3-5.

This is pure *ipse dixit* of the most pernicious kind: having no factual basis or legal basis, and in fact acknowledging that the subject matter is outside his area ("it's more really a legal question than a scientific technical question"). There is simply no way such personal expressions of his views can pass muster as admissible expert testimony. Dr. Brown should be precluded from expressing any opinions about NCP compliance in this matter.

CONCLUSION

For the reasons stated, the Court should grant the motion and exclude the opinions of Dr. Brown identified or described above.

Dated: August 8, 2014

/s/ Steve R. Kuney

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UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF NEW YORK

TOWN OF HALFMOON et al.,

Plaintiffs,

v.

Case No. 1:09-cv-0228, DNH-CFH

GENERAL ELECTRIC COMPANY,

Defendant.

SARATOGA COUNTY WATER AUTHORITY,

Plaintiff,

v.

Case No. 1:11-cv-006, DNH-CFH

GENERAL ELECTRIC COMPANY,

Defendant.

I HEREBY CERTIFY that on this 8th day of August, 2014, a true copy of the foregoing **General Electric Company's Memorandum of Law in Support of its Motion to Exclude Certain Opinions of Kirk Wye Brown, Ph.D.** was served electronically on the following counsel of record:

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